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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/686,829
Filing Date	Oct. 15, 2003
First Named Inventor	Anand P. Narayan
Art Unit	
Examiner Name	
Attorney Docket Number	TCOM0008

### ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
<div>Remarks</div>		

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name			
Signature			
Printed name	Steven J Shattil		
Date	3/4/2005	Reg. No.	40,170

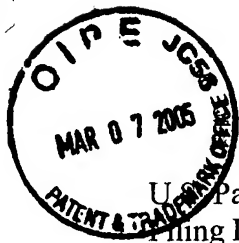
### CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

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Typed or printed name	Steven J Shattil	Date	3/4/2005

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Internal Docket No.: TCOM0008

U.S. Patent Application No. : 10/686,829  
Filing Date : Oct. 15, 2003  
First Named Inventor : Anand P. Narayan  
Title : Method and Apparatus for Interference  
Suppression with Efficient Matrix Inversion  
in a DS-CDMA System  
Date : March 4, 2005

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

### Information Disclosure Statement

Pursuant to 37 C.F.R. §1.56, 1.97, and 1.98, this Information Disclosure Statement is submitted in the above-identified patent application. A listing of documents to be published on the face of any patent granted from this application is submitted herewith on Form PTO-1449. Any other documents or information submitted for consideration by the Examiner are listed in this paper. A copy of each foreign patent and publication, or portion thereof listed or herein identified, is submitted herewith, except that a copy of any U.S. patent application identified herein or any patent publication or other information listed herein cited or submitted in a prior application relied upon for an earlier filing date under 35 U.S.C. §120 and identified below, is not submitted.

### Certification

This Information Disclosure Statement is submitted prior to the mailing date of the first Office Action on the merits received by Applicant in the above-identified application.

March 4, 2005  
Date

  
Steven J. Shattil

Respectfully submitted,

Steven J Shattil  
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PTO/SB/08a (08-03)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1

of 12

**Complete if Known**

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Filing Date	Oct. 15, 2003
First Named Inventor	Anand P. Narayan
Art Unit	
Examiner Name	
Attorney Docket Number	TCOM-0008

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 4088955	05-09-1978	Baghdady	
		US- 4309769	01-05-1982	Taylor, Jr.	
		US- 4359738	11-16-1982	Lewis	
		US- 4665401	05-12-1987	Garrard et al.	
		US- 4670885	06-02-1987	Parl et al.	
		US- 4780885	10-25-1988	Paul et al.	
		US- 4856025	10-08-1989	Takai	
		US- 4893316	01-09-1990	Janc et al.	
		US- 4922506	05-01-1990	McCallister et al.	
		US- 4933639	06-12-1990	Barker	
		US- 4965732	10-23-1990	Roy III et al.	
		US- 5017929	05-21-1991	Tsuda	
		US- 5099493	05-24-1992	Zeger et al.	
		US- 5105435	04-14-1992	Stilwell	
		US- 5109390	04-28-1992	Gilhousen et al.	
		US- 5119401	06-02-1992	Tsujimoto	
		US- 5136296	04-04-1992	Roettger et al.	
		US- 5151919	09-29-1992	Dent	

**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		EP 0558910 A1	01-25-1993	Blaupunkt-Werke GmbH		435972
		EP 0610989 A2	01-31-1994	Philips Patentverwaltung GmbH		435973
		JP2000-13360A	01-14-2000	NEC Corp.		435972
		DE 4201439 A1	07-22-1993	Daimler-Benz		435973
		DE 4326843 A1	02-16-1995	Richard Hirschmann GmbH & Co		435972

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Sheet 2

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		US- 5218359	06-08-1993	Minamisono	
		US- 5218619	06-08-1993	Dent	
		US- 5220687	06-05-1993	Ichikawa et al.	
		US- 5224122	06-29-1993	Bruckert	
		US- 5237586	08-17-1993	Bottomley	
		US- 5263191	11-16-1993	Dickerson	
		US- 5280472	01-18-1994	Gilhousen et al.	
		US- 5305349	04-19-1994	Dent	
		US- 5325394	06-28-1994	Bruckert	
		US- 5343493	08-30-1994	Karimullah	
		US- 5343496	08-30-1994	Honig et al.	
		US- 5347535	09-13-1994	Karasawa et al.	
		US- 5353302	10-04-1994	Bi	
		US- 5386202	01-31-1995	Cochran et al.	
		US- 5390207	02-14-1995	Fenton et al.	
		US- 5394110	02-28-1995	Mizoguchi	
		US- 5396256	03-07-1995	Chiba et al.	
		US- 5437055	07-25-1995	Wheatley III	

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		DE 4343959 A1	06-29-1995	Richard Hirschmann GmbH & Co		522068
		WO 93/12590	06-24-1995	Array-Comm, Inc.		522068
		GB 2280575 A	02-01-1995	Roke Manor Research Limited		522068
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Examiner Name	
Attorney Docket Number	TCOM-0008

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		US- 5440265	08-08-1995	Cochran et al.	
		US- 5448600	09-05-1995	Lucas	
		US- 5481570	01-02-1996	Winters	
		US- 5506865	04-09-1996	Weaver Jr.	
		US- 5513176	04-30-1996	Dean et al.	
		US- 5533011	04-02-1996	Dean et al.	
		US- 5553098	09-03-1996	Cochran et al.	
		US- 5602833	02-11-1997	Zehavi	
		US- 5644592	07-01-1997	Divsalar	
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		US- 5859613	01-12-1999	Otto	
		US- 5872540	02-16-1999	Casabona	
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		US- 5930229	07-27-1999	Yoshida et al.	
		US- 5953369	09-14-1999	Suzuki	

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		US- 5995499	11-30-1999	Hottinen et al.	
		US- 6002727	12-14-1999	Uesugi	
		US- 6014373	01-11-2000	Schilling et al.	
		US- 6018317	01-25-2000	Dogan et al.	
		US- 6088383	07-11-2000	Suzuki et al.	
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		US- 6104712	08-15-2000	Robert et al.	
		US- 6115409	09-05-2000	Upadhyay et al.	
		US- 6127973	10-03-2000	Choi et al.	
		US- 6131013	10-10-2000	Bergstrom et al.	
		US- 6137788	10-24-2000	Sawahashi et al.	
		US- 6141332	10-31-2000	Lavaen	
		US- 6154443	11-28-2000	Huang et al.	
		US- 6157685	12-05-2000	Tanaka et al.	
		US- 6157842	12-05-2000	Kaisson et al.	
		US- 6157847	12-05-2000	Buehrer et al.	
		US- 6163696	12-19-2000	Bi et al.	
		US- 6166690	12-26-2000	Lin et al.	

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		US- 6172969	01-09-2001	Kawakami et al.	
		US- 6175587	01-15-2001	Madhow et al.	
		US- 6192067	02-20-2001	Toda et al.	
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		US- 6222828	04-24-2001	Ohlson et al.	
		US- 6230180	05-08-2001	Mohamed	
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		US- 6275186	08-14-2001	Kong	
		US- 6278726	08-21-2001	Mesecher et al.	
		US- 6282231	08-21-2001	Norman et al.	

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		US- 6282233	08-28-2001	Yoshida	
		US- 6285316	09-04-2001	Nir et al.	
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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
						628531
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 7

of 12

### Complete if Known

Application Number	10/686,829
Filing Date	Oct. 15, 2003
First Named Inventor	Anand P. Narayan
Art Unit	
Examiner Name	
Attorney Docket Number	TCOM-0008

### U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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### FOREIGN PATENT DOCUMENTS

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Sheet 8

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Application Number	10/686,829
Filing Date	Oct. 15, 2003
First Named Inventor	Anand P. Narayan
Art Unit	
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		Application Number	10/686,829		
		Filing Date	Oct. 15, 2003		
		First Named Inventor	Anand P. Narayan		
		Art Unit			
		Examiner Name			
Sheet	9	of	12	Attorney Docket Number	TCOM-0008

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		Application Number	10/686,829		
		Filing Date	Oct. 15, 2003		
		First Named Inventor	Anand P. Narayan		
		Art Unit			
		Examiner Name			
Sheet	10	of	12	Attorney Docket Number	TCOM-0008

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/686,829
		Filing Date	Oct. 15, 2003
		First Named Inventor	Anand P. Narayan
		Art Unit	
		Examiner Name	
Sheet 11 of 12	Attorney Docket Number	TCOM-0008	

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number

10/686.829

Filing Date

Oct. 15, 2003

**First Named Inventor**

Anand P. Narayan

Art Unit

Examiner Name

Attorney Docket Number

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